

Amendments to the Specification:

Please replace paragraph [0080] with the following amended paragraph:

[0080] Input data includes a current density function, where current density is given as a function of at least one of layer, net frequency, or track width, or all or any combination of these. There may be other factors that affect current density and these factors may also be part of the function. The current density function may be provided in the form of a formula, equation, ~~table,~~ table, look-up table, or any other technique for quantifying a current density relationship.

Please replace paragraph [0084] with the following amended paragraph:

[0084] The current requirements for a net changes as the frequency changes. The function of current density as a function of frequency is given in the current density table. For example, typically, as the frequency on a net increases, there is an increase in current or power requirements. The current associated with each device pin of relevant nets, where a +ve value indicates driver/source, and a ~~[[ve]]~~ -ve value indicates receiver or sink. Normally the sum of the currents of all the device pins on a net will be zero, but this is not essential.